

Appl. No. 09/872,141
Amd. Dated June 30, 2005
Reply to Office Action of June 1, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A device for creating a path between a first element and a second element, the path being arranged to include a third element and a fourth element, wherein the first element, the second element, the third element, and the fourth element are included in an optical network, the device comprising:

a processor; and

a storage device, the storage device being arranged to store computer code for implementing a first mechanism which causes the third element to be identified, the storage device further being arranged to store computer code for implementing a second mechanism which causes the path between the first element and the second element to be computed such that the path traverses the third element in a first segment of the path computed while the fourth element is blocked from being included in the first segment and such that the path traverses the fourth element in a second segment of the path computed while the third element is blocked from being included in the second segment, wherein the processor processes the computer codes.

Claim 2 (original): A device according to claim 1 wherein the first element, the second element, and the third element are nodes.

Claim 3 (original): A device according to claim 1 wherein the first element and the second element are nodes, and the third element is a link.

Claim 4 (original): A device according to claim 1 wherein the first mechanism is arranged to identify the third element as being a component of the path.

Claim 5 (currently amended): A device according to claim 4 wherein the first mechanism is further arranged to identify the [[a]] fourth element as being a component of the path, the fourth element being arranged to be traversed after the third element is traversed.

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Claim 6 (currently amended): A device according to claim 5 wherein the second mechanism is further arranged to compute the first segment, the first segment being associated with the first element and the third element, the first segment being included in the plurality of segments.

Claim 7 (original): A device according to claim 6 wherein the storage device is further arranged to store computer code for implementing a third mechanism which causes the fourth element and the second element to be substantially prevented from being included as a part of the first segment.

Claim 8 (previously presented): A device for creating a path between a first element and a second element, the path being arranged to include a third element, wherein the first element, the second element, and the third element are included in an optical network, the device comprising:

a processor; and

a storage device, the storage device being arranged to store computer code for implementing a first mechanism which causes the third element to be identified, the storage device further being arranged to store computer code for implementing a second mechanism which causes the path between the first element and the second element to be computed such that the path traverses the third element, wherein the processor processes the computer codes and the first mechanism is arranged to identify the third element and a fourth element as being components of the path, the fourth element being arranged to be traversed after the third element is traversed, the path including a plurality of segments which includes a first segment associated with the first element and the third element, the second mechanism being further arranged to compute the first segment, the storage device further being arranged to store computer code for implementing a third mechanism which causes the fourth element and the second element to be substantially prevented from being included as a part of the first segment, wherein the second mechanism is further arranged to compute a second segment associated with the fourth element, the second segment being included in the plurality of segments, and wherein the third mechanism

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is arranged to substantially prevent the first element and the second element from being included as a part of the second segment.

Claim 9 (original): A device according to claim 8 wherein the second mechanism is further arranged to compute a third segment associated with the second element, the third segment being included in the plurality of segments, and wherein the third mechanism is arranged to substantially prevent the first element and the third element from being included as a part of the third segment.

Claim 10 (previously presented): An apparatus for creating a path between a first element and a second element in an optical network, the path being arranged to include a third element and a fourth element, the apparatus comprising:

a first means for identifying the third element; and

a second means for computing a path between the first element and the second element such that the path traverses the third element in a first segment of the path computed while the fourth element is blocked from being included in the first segment and such that the path traverses the fourth element of the path computed while the third element is blocked from being included in the second segment.

Claim 11 (original): An apparatus according to claim 10 wherein the first means identifies the third element as being a component of the path.

Claim 12 (previously presented): An apparatus according to claim 11 wherein the first means identifies the fourth element as being a component of the path, the fourth element being arranged to be traversed after the third element is traversed.

Claim 13 (previously presented): An apparatus according to claim 12 wherein the second means computes the first segment, the first segment being associated with the first element and the third element.

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Claim 14 (previously presented): An apparatus for creating a path between a first element and a second element in an optical network, the path being arranged to include a third element, the apparatus comprising:

a first means for identifying the third element;

a second means for computing a path between the first element and the second element such that the path traverses the third element, wherein the first means identifies the third element as being a component of the path and identifies a fourth element as being a component of the path, the fourth element arranged to be traversed after the third element is traversed, the path being arranged to include plurality of segments, the second means being arranged to compute a first segment associated with the first element and the third element, the first segment being included in the plurality of segments; and

a third means for substantially preventing the fourth element and the second element from being included in the first segment, wherein the second means computes a second segment associated with the fourth element, the second segment being included in the plurality of segments, and wherein the third means substantially prevents the first element and the second element from being associated with the second segment.

Claim 15 (original): An apparatus according to claim 14 wherein the second means computes a third segment associated with the second element, the third segment being included in the plurality of segments, and wherein the third means substantially prevents the first element and the third element from being associated with the third segment.

Claim 16 (currently amended): An apparatus for routing a path between a source node and a destination node included within a network, the network further including a plurality of elements, the apparatus comprising:

an identifier for identifying a set of elements to be included in the path, the set of elements being included in the plurality of elements;

a blocker for blocking at least a first element included in the set of elements from being used in generating a first segment of the path and for blocking at least a second element included in the set of elements from being used in generating a second segment of the path; and